



# Coxmate SRT: User Manual

## 1. Introduction

The **Coxmate SRT** provides audio, stroke rate display and stop watch for cox's. It is a compact, low cost unit. It utilises the latest in digital electronics to increase battery life by 60%. It includes Coxmate's latest magnetic mounting technology \* with adjustable mounting, to simplify installation, provide clearer viewing and improve reliability. It is a part of the new 'T' (tough) range. These are made to be tough to withstand the rigours of rowing. The **SRT** can be connected to an existing Coxmate or Nielsen Kellerman® cable harness and speakers.

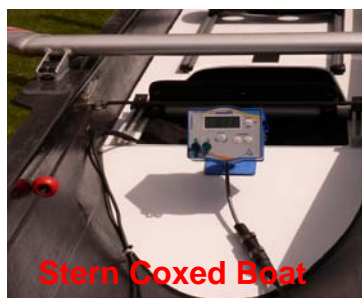


## 2. Getting Started

**Charging Unit:** Plug the charger unit in. Charging will take up to approx 12 hours if batteries are completely flat. The display will flash indicating charge status e.g. 'C56', indicates the charge level is 56%. When fully charged the 'Full' will be displayed. It is good for batteries, if they can be fully charged and discharged for first two cycles. The batteries may not have been used for some time and this exercising helps restore their capacity. Note: Unit will not operate while it is being charged.

C56

**Fixing Mounting Bracket into boat:** Determine position for mounting the adjustable bracket in boat. The exact location will depend on shape/construction of boat and preference of cox. Three examples for mounting are shown: The first is for a stern coxed boat. The second is a bow coxed boat with the SRT fitted externally on bow cover. The third shows the unit fitted internally under bow cover. The base of the mounting plate can sit facing up as in external mounting shown, or facing down as with internal mounting shown. The mounting plate is normally attached with the double sided tape. If surface is not suitable, use the stainless steel screw sets provided. If you use the tape, make sure the surface is clean and dry. An alcohol swab is provided for cleaning surface. Once plate is stuck, avoid applying any force on bond, until tape has had a chance to 'set'. The unit can still be used but care should be taken for ~24 hours. The stiffness of the friction hinges can be adjusted by tightening/loosening the two screws.



Stern Coxed Boat



External Mount for Bow Coxed Boat




Internal Mount for Bow Coxed Boat



The mounting bracket can be simply folded out of the way – see picture to left - at the end of a rowing session; either to assist cox getting in and out of boat, or to avoid mounting bracket getting in the way when boat is racked. Connect the 4 pin rubber connector which is attached to the mounting bracket into harness – this is only done once, and does not need to be disconnected/connected each time boat is used. If you have concerns about the SRT unit becoming detached from mounting plate and disappearing overboard, then loop the wrist strap (not shown) over the mounting plate.

**Getting into boat:** Place unit onto Mounting Plate. Once the unit is close to mounting plate, the magnets will take over. The picture below left, shows the SRT being presented to mounting plate. The magnets are 'keyed' to ensure correct orientation.



Plug microphone into 'Mic' socket. Press  button to turn unit On. It will briefly display 'ON' and then charge level eg 'C56'. It will give a short beep through speakers – this lets you know the speakers are connected. It will then display stroke rating if seat sensor is activated, eg '25.8' means 25.8 strokes per minute. If there is no signal from seat sensor for 12 seconds '---' will be displayed.


25.8

To adjust volume, use '+' and '-' buttons. When these are pressed the volume will be displayed temporarily eg 'u67' (volume is 67%). Once set this volume will be remembered, even if unit is turned Off/On. If you wish the coach to talk to crew through speaker system, then connect output from radio into 'Radio' input. This connection uses a standard 3.5mm jack plug.

u67

**The Stopwatch:** The stop watch button starts, stops and resets timer. To reset timer, the button must be held down for one second. If the stop watch button is pressed the display will show time for two seconds and then revert back to rate. If you want to display time continuously, press the [Display] button – this toggles display between rate and time. The example display represents 3 minutes and 59 seconds.

If the timer is running whilst the rate is displayed, the timer status will be shown by the ':' symbol. This symbol flashes when timer is running, is steady when timer has been stopped and is not present if timer has been reset.

**To turn unit off:** Removing unit from mounting base will automatically turn it off. The display will flash 'SP' for 3 seconds – indicating no speaker harness is connected. Alternatively hold the  button down for 1 second. The unit will display 'OFF' when it is off.

3:59

Timer Status  
25.8

### 3. Battery Management

The unit is fitted with 8 x 750mAh NiMH batteries. The charging circuit automatically switches off when they are fully charged. This means units can be left permanently on charge without causing battery deterioration. Charge time is approx 12 hours and the operating time is up to 15 hours. This time will vary depending on how vocal the cox is. The low battery indication is designed to come on with about 10% of battery capacity remaining. If you want to check battery status of unit, turn unit on, and charge level, eg 'C70' indicating 70% will be briefly displayed. When battery is very low and voltage drops, the amplifier will become distorted and 'screech'. To maximize battery life it is good for the batteries to be fully discharged and charged periodically – every 3-6 months. This can be achieved by leaving unit 'on' and connected to cable harness. When the unit is not being used the batteries will gradually lose their charge – it takes approximately three months to fully discharge.

LO BAT  
25.8

When charger is connected to unit, it will be turned off. Unit will not operate whilst it is being charged.

### 4.0 Maintenance and Fault Finding

The only routine maintenance required is the cleaning of the electrical connections, and the washing off of any salt/impure water with clean fresh water. The contacts on both the magnetic mounting base and the unit should be kept clean. Smearing a thin coating of silicone grease on these contacts will help prevent corrosion. These contacts are magnetic and will pick up iron filings and other magnetic particles. These should be removed -a piece of sticky tape is helpful for this.

The following is a list of potential problems with suggested actions:

PROBLEM	ACTION
No power up	Check unit is charged. If not, charge. If no charge indication, check charger either by trying a different charger or measuring the voltage on charger jack plug – should be 14-22VDC in centre referenced to the outside metal surface of the jack plug.
No audio output	Check volume setting is not 0%. Check speakers are connected. Remove unit from mounting base. The resistance between the two contacts on right side of magnetic mounting base should be between 2 and 4 ohms. Turn unit on with speakers connected. If there is a beep, then problem is likely to be microphone. If microphone is not working it can be replaced.
No Stroke Rate	Check contacts on mounting base and unit are clean. Unit can be checked by disconnecting 4 pin rubber connector from the harness, and shorting the pins 1 and 4 with a paper clip or similar. <div data-bbox="1193 1464 1433 1693" data-label="Diagram"> </div>
Screeching Sound	Batteries need charging.
Battery will not hold charge	Check battery charger – 14-22VDC in centre referenced to the outside metal surface of the jack plug. If charger OK and batteries are more than three years old, replace batteries. These should be same type as original ones, available from <a href="http://www.coxmate.com.au">www.coxmate.com.au</a>

If the above does not fix problem then contact local agent or email; [service@coxmate.com.au](mailto:service@coxmate.com.au) with details. A response, in normal circumstances, will be made within 24hrs.

- Patent application made.

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